TXD008091712

TEXAS WATER COMMISSION

September 8, 1986

Mr. E. Brooks Parker
Environmental Superintendent
Aluminum Company of America
P. O. Box 472
Rockdale, Texas 76567

Re: Alcoa Rockdale Works
Solid Waste Registration No. 30132
Potliner Waste Disposal Site Post Closure Care
and Monitoring Program

Dear Mr. Parker:

On July 24, 1986 this office received your Post Closure Care Plan and Ground Water Monitoring Program. After review of the post closure care and monitoring program this office concurs with your proposed program. You should be aware that if the Alcoa Rockdale Works is required to submit a RCRA Part B permit in the future, the potliner area will have to be addressed as a non-RCRA industrial solid waste unit which has released contamination to the groundwater.

If you have any questions please contact Mr. Clifford J. Hall, P.E., here in Austin at 512/463-8425.

Sincerely,

Susan S Ferguson for

Samuel B. Pole, Chief
Hazardous and Solid Waste Enforcement Section
Hazardous and Solid Waste Division

CJH/da

cc: District 3 Office
Mr. Richard A. Pearce - Law Engineering & Testing Company

Aluminum

DATA CHANGES

EPA IDENTIFICATION NUMBER/C101=12: TXD008091712

TWC #/C116=6:

PREPARER: [illegible]

DATE: 12-30-87

Facility Name/C104=40:

Mailing Address/C106=30:

County/C114=3:

City/C107=25:

ST/C108=2:

Zip/C109=5:

Facility Contact Person/C105=30:

Ownership Code/C102:

Location Address/C110=30:

ST Dist/C115=2:

City/C111=25:

ST/C2=2:

Zip/C112=5:

Owner's Name/C1503=40:

GEN TRN TSD UIC:

C1105: 5

C305:

Other: C =

Other: C =

Telephone/C113=10:

Waste Codes to be added/C2701:

Waste Codes to be deleted/C2701:

Process Codes- Add - Delete - Change

C1801=3: C1802=13: C1803=1 C1804=1:

C1801=3: C1802=13: C1803=1 C1804=1:

C1801=3: C1802=13: C1803=1 C1804=1:

Other Coding as necessary:

Entered by: R.V. Date Entered: 2-4-88 QC: File Code: II, 1.B

ATTACHMENT H

Table III-4 Hazardous Waste Facility Components List

Facility Component Name	TWC Seq. No.	Status: Inactive	Status: Active	Status: Proposed	Design Capacity (cu yds)	Design Capacity (gal)	Design Capacity (lbs)	Number of Years Utilized	Date in Service
Pit (Unlined)		X			35,000			Unknown	1960

Verbal Description: An old mine pit used for disposal of spent potlining around 1960. The area has been partially encapsulated in accordance with a plan approved by the TWC.

Verbal Description:

Verbal Description:

Verbal Description:

Verbal Description:

Verbal Description:

ATTACHMENT H

Table III-4 Hazardous Waste Facility Components List

Facility Component Name	TWC Seq. No.	Status: Inactive	Status: Active	Status: Proposed	Design Capacity (cu yds)	Design Capacity (gal)	Design Capacity (lbs)	Number of Years Utilized	Date in Service
Tank (Surface Storage)	*		X			28,000		1	1988
Verbal Description: Spent potlining leachate is stored in this tank awaiting treatment or shipment for off-site disposal.									
Tank (Surface Processing)	17		X			5,000		4	1985
Verbal Description: Spent potlining leachate is evaporated in this tank to reduce the volume of waste liquid.									
Lined Pit	01	X				47,000		4	1974
Verbal Description: This facility was the first cell of a landfill (Facility 01) used for disposal of spent potlining.									
Lined Pit	01	X				47,000		4	1979
Verbal Description: This facility was the second of a landfill (Facility 01) used for disposal of spent potlining.									
Lined Pit	01	X				47,000		4	1983
Verbal Description: This facility was the third of a landfill (Facility 01) used for disposal of spent potlining.									
Pot Washing Station	*		X					1	1989
Verbal Description: Emptied pot shells are washed in a closed loop washing facility. Periodically water is removed and added to spent potlining leachate concentrate storage tank. Separated solids are drained and placed on one of the storage piles.									

TWC [illegible] *Proposed

C. Handling Pot Shell Washing Water

Pot shells which have been emptied must be cleaned and repaired before being relined and placed back in service. The pot shells are taken to a washing unit where they are sprayed with water to soften the residue remaining on the surfaces. The water is recycled in a totally enclosed system. In this system it is filtered to remove any solids. Periodically, the water is removed from the system and taken by tank truck to the spent potlining leachate concentrate storage tank. From that point it is handled the same as the concentrate.

Solids which are removed from the system are drained and added to one of the indoor storage piles.

ATTACHMENT G

A. Handling Spent Potlining Material (Waste No. 031)

Aluminum smelting cell linings must be removed from service and disposed of when the cells fail. The removal and disposal processes are as follows:

Removal:

The carbonaceous portion of the potlining material is wetted and broken up with a large pneumatic paving breaker, removed from the pot shell with a mechanical handling machine and placed in transport containers. The containers are placed on trailers, taken to an indoor storage area and emptied onto the indoor storage pile.

The pot shell containing the remaining spent lining material is removed from its stall with a building crane, placed on a trailer and taken to the same indoor storage area. There, the lining material is dumped onto the indoor storage pile using a building crane.

The accumulated lining material is removed from the storage pile with a front-end loader and placed in dump trucks for relocation to a larger on-site indoor storage pile or for shipment to an off-site hazardous waste disposal facility. It can also be crushed to facilitate its beneficial use as a fuel.

B. Handling Spent Potlining Leachate (Waste No. 033) and Leachate Concentrate (Waste No. 025)

Spent potlining leachate from an old disposal site is collected in a French drain system and accumulated in an underground collection tank. The collected leachate is pumped from the tank to an above-ground fiberglass storage tank. From this tank the leachate is pumped to another above-ground tank which is equipped with steam coils. In this tank the leachate is evaporated and its volume is reduced 90-95%. The resulting leachate concentrate is pumped to one of two above-ground storage tanks to await either treatment in a hydrolysis unit to destroy iron-complexed cyanides, or shipment in tank truck or tank rail cars to an off-site hazardous waste disposal facility.

Leachate concentrate which is to be treated by hydrolysis is pumped or taken by truck to the hydrolysis unit. The treated leachate is transported in tank trailers to a storage tank and held for shipment to an off-site disposal facility. In the event it can be de-listed, it will be returned to the potroom scrubber water system as make-up water.

ATTACHMENT F

#9 Additional storage tank for storing leachate concentrate.

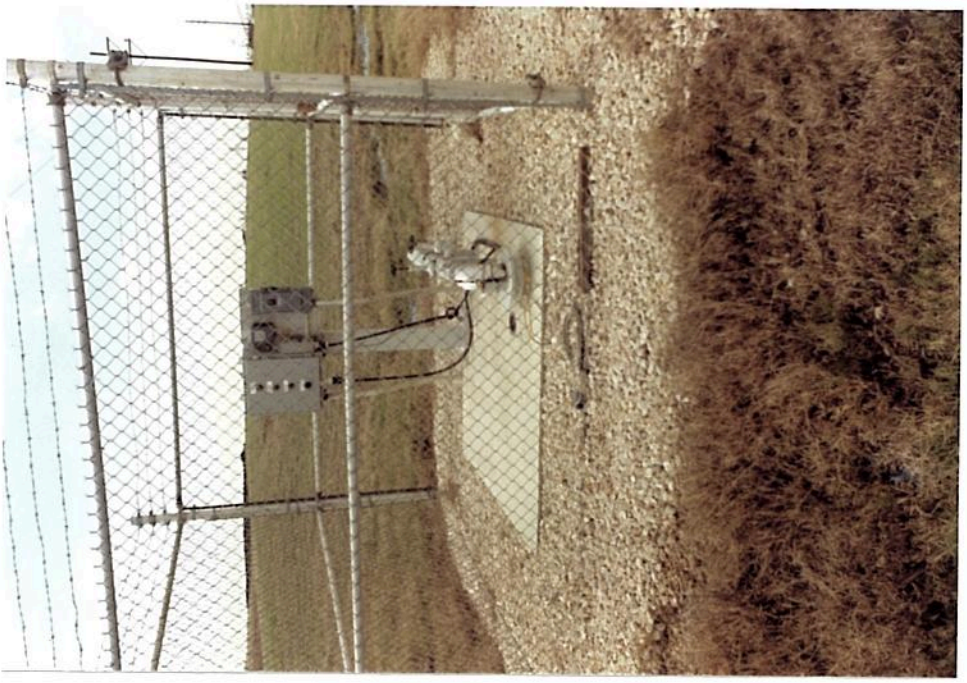
#10 Hydrolysis unit used to destroy cyanide in leachate concentrate at Rockdale Works.

ATTACHMENT F

#7 - Two storage stanks. Small tank accumulates leachate which is collected from the pump at the French drain collection system (see photo # 6) Large tank stores leachate concentrate which is generated when leachate is evaporated to reduce its volume.

#8 Leachate evaporator at Rockdale Works.

ATTACHMENT F

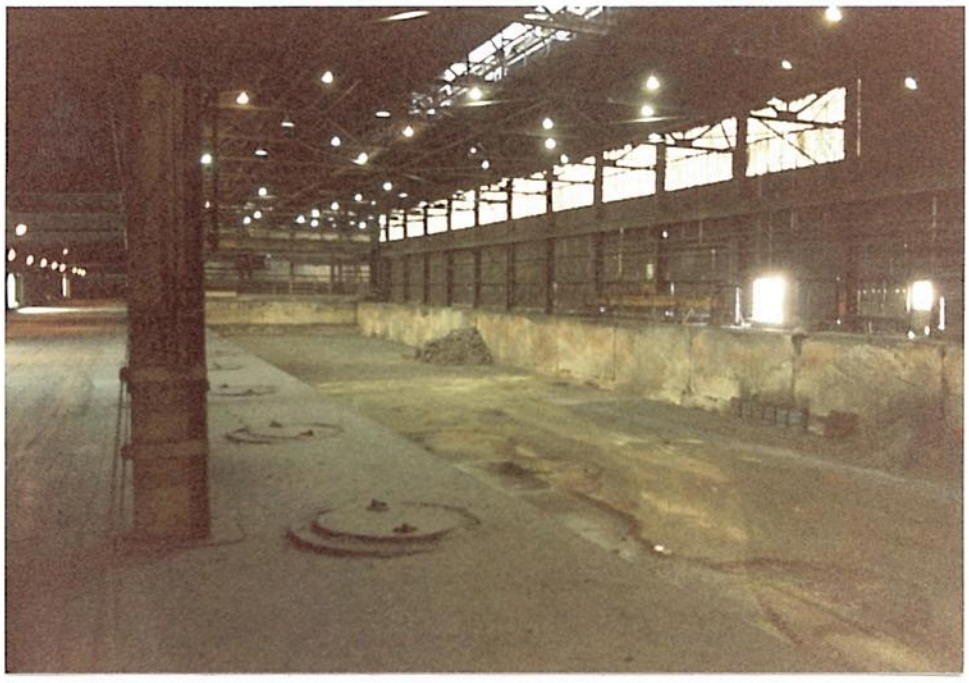


#5 Pump at the French drain collection system associated with old spent potlining disposal area. (It accumulates leachate from old spent potlining disposal area.) Background (grassy knoll) covers an old spent potlining disposal site.

#6 Same as #5. Also shows monitor well (left of mid-center of photograph) at crest of hill.

ATTACHMENT F

#3 Spent potlining crusher in Building 60. Small blue drums (far left) contain samples of crushed spent potlining.

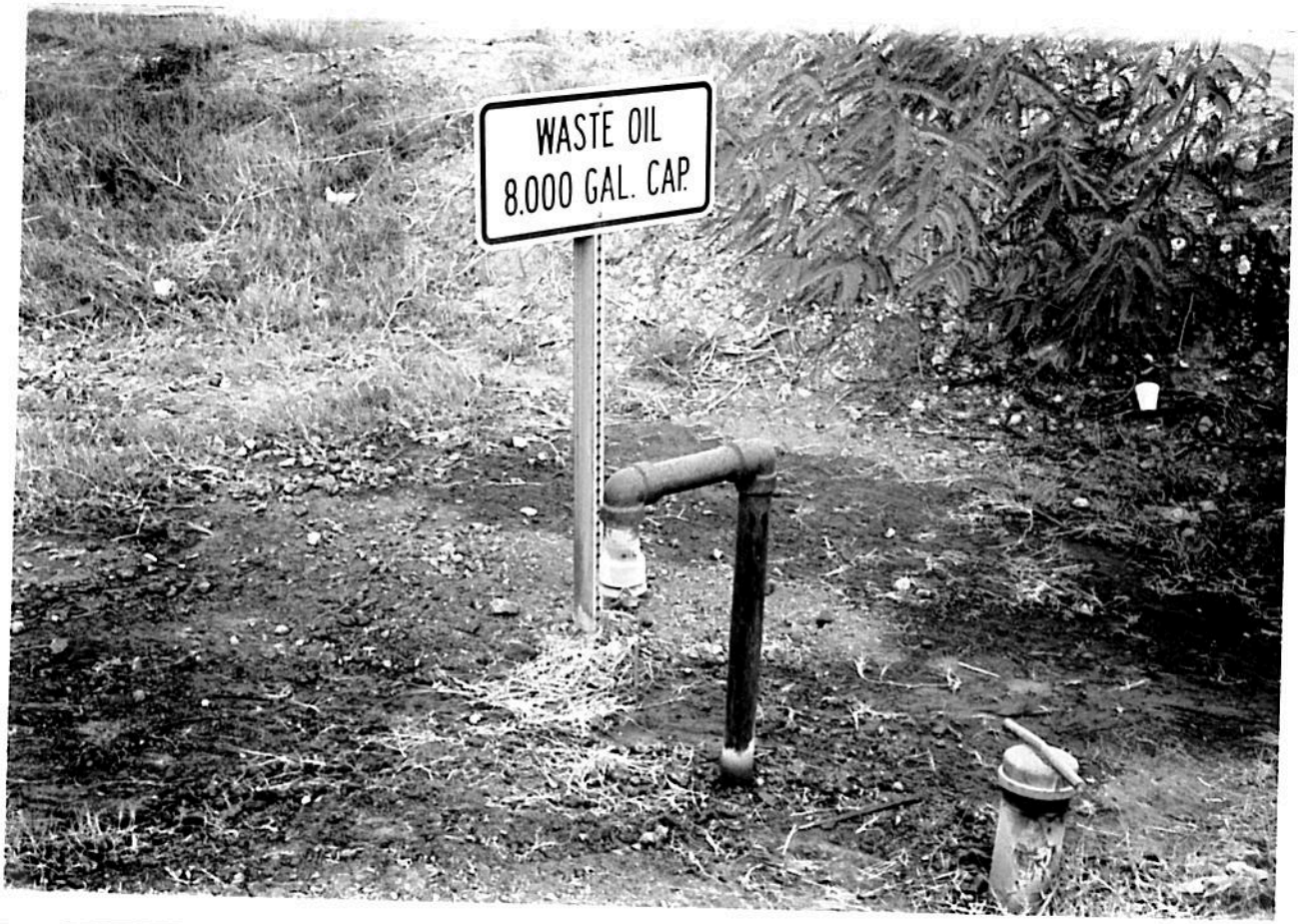


#4 Interior of Building 60 -- main storage area for spent potlining. A small amount of spent potlining can be seen in the center of photograph.

ATTACHMENT F

#1 - Exterior of Building 27 - potlining storage building.

#2 Interior of Building 27 shows accumulated spent potlining and an empty potshell. Spent potlining is periodically removed and sent to plant storage area (building 60) or shipped off-site for disposal.



SPENT SOLVENT TREATMENT FACILITY - IGC FUEL OFFICE UNDERGROUND TANK

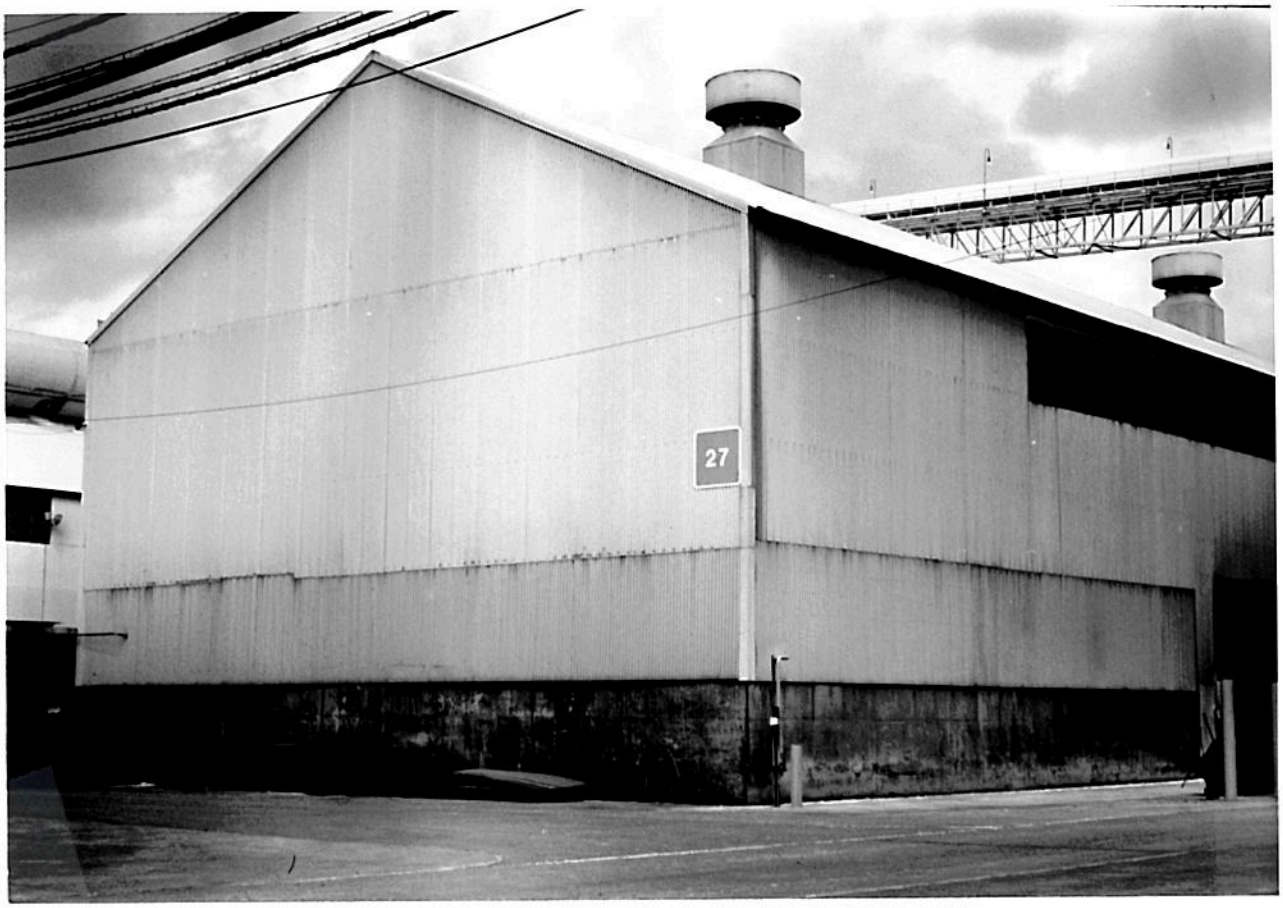
(No photograph available of south yard spent solvent treatment tank - it will be similar to this)

SPENT SOLVENT TREATMENT FACILITY - BLDG. 144

SPENT SOLVENT STORAGE FACILITY - BLDG. 45A

FUTURE SPENT POTLINING DISPOSAL FACILITY

ACTIVE SPENT POTLINING DISPOSAL FACILITY



SPENT POTLINING STORAGE FACILITY - BLDG. 27

II.A. Date Facility Began Operation

1. Spent Potlining Storage Facility, Bldg. 27 - March, 1968

2. Spent Potlining Disposal Facility - April, 1975

3. Spent Solvent Storage Facility, Bldg. 45A - January, 1953

4. Spent Solvent Treatment Facility, Bldg. 144 - December, 1977

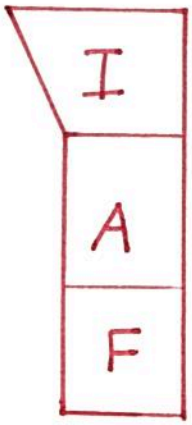
5. Spent Solvent Treatment Facility, South Yard - November 17, 1980

6. Spent Solvent Treatment Facility, IGC Fuel Area - March, 1978

1712

MAP LEGEND

Boundary of Property Owned or Controlled By Alcoa



I ← Inactive Spent Potlining Disposal Area - Closed

A ← Active Spent Potlining Disposal Area

F ← Future Spent Potlining Disposal Area

I — Spent Solvent Treatment Tank - 500 Gallons - Above Ground

II — Indoor Spent Solvent Storage Facility

III — Indoor Spent Potlining Storage Facility

IV — Spent Solvent Treatment Tank - 2,000 Gallons - Underground

V — Spent Solvent Treatment Tank, 8,000 gallons - Underground

1 thru 13 — Water Wells